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ABSTRACT

The structures of primary and secondary general education in a number of industrialized countries are compared to show that there are all possible combinations of educational "systems" that are, in most cases, the outcome of a remote historical legacy. This legacy, regardless of its merits, should not be considered as inviolate, but rather should be subjected to new thinking time and time again, to allow for new factors (political, social, economic, cultural, scientific, and so forth) conducive to its evolution. The countries under consideration are the six member countries of the European Economic Community and the United States, Great Britain, and the U.S.S.R. The organizational structures of vocational and technical "secondary" education are not considered. The problems of reforming the structures of secondary education are not abstract: the difficulty does not lie in conceiving a system considered as ideal, but in conceiving transitional systems, concrete ways of changing over from the present parallel stream system to the reformed system, and in accepting the difficulties arising from this transition. (Author/IRT)

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No. 26 THE STRUCTURE OF GENERAL SECONDARY EDUCATION IN INDUSTRIALIZED COUNTRIES

by Raymond Poignant

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Raymond Poignant

CONTENTS

Introduction

In elaborating an educational plan in a given country, one may simply attempt to maintain the existing school organisation (i.e. the 'structures'). In this case, the plan will merely attempt to extend a system, or certain parts of the system, which is already familiar. In reality, this situation rarely arises and in most cases the plan for expanding the school and university system also comprises some change in it. It sometimes even happens that the main purpose of the plan is just such an institution of far-reaching change in structures rather than a quantitative expansion.

This infers that in most cases the educational 'planner' should come to ask himself how much the extension he is proposing to plan must be accompanied (or not) by structural reforms which, together with reforms involving methods and syllabi, are an essential factor in educational reform.

Admittedly, in most countries, a dividing line is laid down between the functions of separate bodies, some being responsible for the 'quantitative' aspects of the school and university 'plan', while it is the task of others to consider educational reform. In other words, specialist pedagogical bodies(1) are often requested to define the ideal reform of education, while those who prepare the 'plan' have to define and bring together the financial, material and human conditions needed to implement this reform. However, while certain administrative traditions have led to this division of responsibilities, the expression 'educational planning' unquestionably applies to both functions and it should be possible, if not to amalgamate them completely, at least to co-ordinate them effectively, through proper administrative organisation.

This is why, under the reservation of the special technical competence that can only be the responsibility of certain highly specialised pedagogical bodies(2), the development plan for the school system of the country must be the outcome of combined consideration of the choice of objectives (an essential part of which are the 'structures' of the education system) and the determination and choice of the means of achieving these objectives.

Accordingly, it is important that the various possible solutions to the problems of the structure of education be thought out by the educational 'planner' and, over and above the structures, that the guiding principles of the substance of the studies are not totally beyond those responsible for deciding the main orientations of the economic and social policy of the country.

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(1) The various pedagogical councils or committees of the Ministries of Education of the countries.

(2) The foremost example of which is the detailed content of the syllabi of any particular discipline.

The subject we shall in face be dealing with here will be more modest and will be confined to comparing the structures of primary and secondary general education in a number of industrialised countries. The purpose of this comparison is to show that there is no such thing as 'an education system' and instead, all possible types of combination, which are in most cases the outcome of a remote historical legacy. This legacy, regardless of its merits, should not be considered as inviolate, but rather should be subjected to new thinking time and time again, to allow for new factors (political, social, economic, cultural, scientific, etc.) conducive to its evolution.

The reason we have deliberately limited this problem of comparison of the structures of general education to the industrialised countries is that we consider that at other stages of economic development, problems arise in a different way and cannot automatically be combined, as is only too often done. Again, certain countries had to be chosen from the industrialised countries

We have confined ourselves to those covered in the work entitled "Education and Development"(1) which analyses the educational systems of the six Member countries of the European Economic Community, plus the United States, Great Britain and the U.S.S.R.

Furthermore, at this juncture, we have not considered the organisational structures of vocational and technical 'secondary' education, although these are clearly related to those of general education and to some extent governed by them.

I. THE HISTORICAL ORIGIN OF THE GENERAL EDUCATION SCHOOL IN THE EUROPEAN COUNTRIES AND FACTORS GOVERNING ITS DEVELOPMENT

A. The evolution of structures from the 18th Century to 1950

No understanding of the often emotional debates on reform of structures in secondary schools in the European countries is possible without at least a broad understanding of how school structures are set up.

In France, for example, just before the revolution, there was a system that could be termed 'dualistic'. On the one hand, there were parish schools dispensing the rudiments of an education that would today be called elementary (reading, writing and arithmetic). On the other, the 'colleges', the origins of which go back to the Renaissance (university, Jesuit, oratorical colleges, etc.). These colleges led to the initial university qualification (the 'baccalauréat"), though their education (based

(1) R. Poignant, Education and Development in Western Europe, the United States and the U.S.S.R., New York, Teachers College Press, Columbia University, 1969.

on the classical languages) started at elementary level and did not fit in with that of the parish schools. (In the 20th Century, the famous British 'public schools', which were private with paid attendance, were a kind of survival of the 'college' system set up in the 16th Century with their own preparatory elementary classes).

Well after the French Revolution, the 19th Century did not witness any radical change in the former system.

The primary school tended to develop and to become obligatory, though it still did not form the basis of the school pyramid. The 'lycée' and secondary college system, with their paid elementary classes, ran in parallel and were almost exclusively the reserve of the children of a bourgeoisie of shopkeepers and businessmen who gained political power and held on to it by monopolising the 'levers of power' through the secondary school. Only in 1924 were the syllabi of the elementary classes of secondary schools and primary schools standardised, and it was not until 1945 that the elementary classes of the public colleges and lycées which were still attended in the majority by the children of the bourgeoisie were gradually eliminated.

In France, therefore, over one and a half centuries were needed after the Revolution merely to organise a primary school common to all classes of children, and the pattern was similar throughout Europe. In the meantime, during the 19th Century, owing to the pressure of demand for intermediate executives of the industrial revolution, new types of secondary school of more practical character were organised (the German 'Realschulen', various higher primary schools, etc.) forming outlets for the most gifted children of the common primary schools.

In this way, towards the end of the 19th Century, the following were to be found in most European countries:

- A common elementary school, which was not compulsory everywhere;
- a preparatory 'higher primary' school for intermediate executive or office staff position,
- a paid pre-university secondary school with very low enrolment (2 per cent of the age groups) and of very marked social character.

In 1950, just after the second world war, the situation could be characterised as follows:

(1) 7, 8 or 9 years of compulsory education is the general rule.

(2) Elementary and secondary classes are free.

(3) On completing the elementary cycle, there are three parallel paths for pupils (lasting 4, 5 or 6 years according to the country), i.e. at about 11 or 12 years of age.

(a) Primary school leaving studies are compulsory (duration of 2, 3 or 4 years, depending on the country).

(b) Entrance to various forms of higher primary schools (by examination).

(c) Entrance to the 'pre-university' secondary school (by examination).

In addition, in certain countries (in particular the Netherlands) there was the possibility of attending special secondary schools for girls.

B. New factors of evolution

The advances achieved in the actual reality of the concept of democracy provided the bases for the development that can be observed in all the 'old' European countries since the start of the 19th Century (compulsory schooling, free education, common educational basis, etc.). There was an increasing awareness that social differences essentially reside in educational differences and the democratic ideal, while enabling differences in ability to be overcome, tends to bring about increasingly concrete guarantees of the principle of equal possibilities of acceding to extended education, regardless of the social origin of the child or where his family resides.

Now, in actual fact, after the second world war, the initial major studies of the sociology of education revealed that following common elementary school, the range of choices offered to 11 to 12 year olds, i.e. the Europeans of to-morrow, was more a function of social factors (social origin) or incidental geographic factors than of pedagogical factors proper (learning ability). As a result, the ideal of equal opportunity appears remote and this triggered new 'school battles' on the problem of true ''democratisation' of access to second and third degree extended studies.

Among other things, one of the outcomes of these observations was that the existence of the 'parallel' path system following the 'unic' elementary school was called into question. Two main(1) orders of consideration led in particular to extending the common schooling system to all children beyond the elementary classes. One type of consideration is pedagogical, the other more social and political in nature.

(a) Pedagogical arguments: The relative value of the orientation decided at the age of 11.

The criticism levelled against the 'parallel' education system of the second degree originate firstly from pedagogists, psychologists

(1) Moreover, the evolution in working conditions in industrialised countries as well as the increasing difficulty in performing civic duties justify the extension of secondary education to all so that the younger generation may be prepared to go into professional training and become responsible citizens.

and biologists who contend that it is impossible to make any serious objective selection at such an early age, at a stage in the physical and psychological development of the child in which it is futile to try to make an almost definitive assessment of the child's capabilities with a view among other things to paving the way - through the entrance examination to the secondary school - to the majestic road to pre-university secondary education or, on the contrary, barring this road.

Through various arguments, psychologists, biologists, and pedagologists consider that at least, it is preferable to await the age of puberty, with the new physiological equilibrium that is then reached by the adolescent, to decide the educational options which in fact are to determine the entire future of the child (though naturally with the proviso of the need to arrange the possibility of subsequent re-orientations). The gist of these arguments is therefore to extend the period of common studies beyond elementary classes which means accepting that the initial classes of the secondary education or what is sometimes called the first cycle, must themselves form part of the common basic education to all children from which it will be possible to make a more rational choice of the orientation of the child towards the various different types of subsequent education.

(b) Political and social arguments : early selective examinations give more edge to the children of educated families

In theory, after the common period of elementary studies (4, 5 or 6 years, depending on the country), regardless of their social origin, all children appear to have the same chance of success in the entrance examination to the grammer school or 'lycée', since so far they have all undergone the same schooling; the selective process - if it can then justifiably be called truly valid - then appears from the formal standpoint as perfectly egalitarian and democratic.

This is far from the truth and statistics prepared by the sociologists of education clearly show that the chances of success in the examination taken at 11 to 12 years old vary widely with the family origin of the child; even before attending primary school and throughout primary education, the child receives additional education from his family (development of aptitudes) which is considerable and which unfortunately differs widely with the social class; among other things, the 'educationally conducive' role of intellectual parents (intermediate and higher executives) is generally manifestly greater than that of manual workers.

The problem is not whether the children of intellectual social levels are potentially more intelligent at birth than those of manual workers; on the contrary, all studies of the laws of hereditary show that statistically the children of a given social group enjoy no prior advantage at birth over those of other social groups. Naturally, this

'statistical' equality applies to a sufficiently wide sample; on the other hand, individual differences are considerably but these are to be found in all social groups.

However, equal 'potential' or 'innate' abilities are one thing, while the development of these abilities is another.

Now, the fundamental problem from the point of view of equal opportunity is that of the part played by the family in the development of the abilities of the child and the differences to be observed in this family action. In certain social classes, the family preceeds and then consolidates highly effectively the work of the teacher while in others this action is faint or in particular tends to different ends.

To summarise, educational selection made suddenly at 11 to 12 years old inevitably favours the children of those social levels(1) with the most effective educational action; in France, for instance, statistics which already date some years concerning the entrance examination to the initial class of the 'lycees' show that 97 per cent of the children of teachers passed them!

The major obstacle to equal opportunity depends on the child's family, there is no way of preventing parents from awakening and fostering the abilities of their children. On the contrary, they should be congratualted for doing so.

Herein resides the essential difficulty (more than inequality in material means) of the problem of the 'democratisation' of extended education. To solve it, in the French school reform plan of 1793, the conventionalist Le Peletier de St Fargeau recommended that all children be raised in national boarding schools from birth; one has to admit that this solution is logical. At the most, one is obliged to note that so far, save for a few rare exceptions, no country has carried into practice the raising of children in community rearing centres. Perhaps the future solution is to be found herein!

Naturally, all this does not mean that proletarian families are without educational effect on their children: quite the contrary, from the standpoint of moral and sensitive education, they may offer more than other families. However, from the standpoint of purely intellectual awakening, and with respect to school requirements, the situation is clearly different.

Faced with this situation, the reaction is to attempt to find a solution by changing education structures. In accordance with what the specialists are asking for, let there no longer be a selection made at

(1) These social levels are not necessarily those known as 'capitalist' but essentially educated families.

11 to 12 years old and let the natural action of the school be extended so that the relative educational role of the family will dwindle, though without completely disappearing.

In this way, the analysis of the problem from the social and democratic standpoints concurs with the previously summarised reactions of the psychologists, biologists and pedagogists: the length of common general education should be extended to the level of the second degree classes.

Agreed, one had to be realistic and admit that in order to organise a common initial secondary cycle, or even a common complete secondary cycle, the educational role played by the family will not be completely eliminated and this role will still intervene later in school selection(1). However, international comparisons provide concrete proof that it will lessen the discrepancies arising from the varying social origins.

These two arguments - pedagogical and social - underlie all reforms recently undertaken in the 'old' countries of Western Europe to combine the main three channels offered to the 11 to 12 years old: the 'noble' pre-university education, the middle (higher primary education) path and the proletarian path (primary school leaving classes).

To tell the truth, the solutions adopted in the various Western European countries differ widely from one country to the next and appreciably from those which the USA and the USSR instituted just before the second world war. It is interesting to compare them.

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(1) As showed by studies published on the social aspects of access to higher education in the socialist countries of Eastern Europe.

II. AMERICAN AND SOVIET SCHOOL STRUCTURES AND REFORMS NOW BEING CARRIED OUT IN WESTERN EUROPE

A. The structures of the American and Soviet general educational school

(a) The Soviet general polytechnical school

In education as in many other fields, the Soviet regime set up in 1917 attempted to break completely with the past and abandon the tsarist system, which was fairly similar to the Western systems of the time, and build an entirely new structure.

In 1918, a Declaration by the Minister for Public Instruction, Lunatcharski, laid down the principle of the 'continuous ladder', namely a general education system in which each cycle leads to the following cycle right up to the university. Today, as part of a complete ten years secondary education (7 to 17 years), the elementary cycle (7 to 11 years) and the initial secondary cycle (11 to 15 years) are compulsory and common to all children. Extension to ten years of education (complete secondary education) to all children is scheduled for 1970. Already 70 per cent of the pupils in the compulsory 8th grade enter 9th grade.

The basis of the programmes is identical for all pupils (total absence of academic streams in all secondary classes). However, in addition to the common programme, for some years now, classes are developing which tend to awaken and foster special abilities (optional classes, special 'profile' classes, etc.)(1).

In fact, generalisation of 10 year education after 1970 is the end result of the series of highly realistic stages which many developing countries could copy:

- In 1930, 4 years of compulsory education (7 to 11) in rural areas and 7 in the cities.
- In 1949, generalisation of 7 years of education in rural areas.
- In 1958, expansion of compulsory education to 8 years (7 to 15 years).
- After 1970, generalisation of 10 years of education.

However, while the objective of the 8th plan (1966-1970) is to provide all Soviet children with a complete secondary education, it will still be accepted that after 1970, the final two years of study (15 to 17 years) are given either full-time for the great majority, or part-time (school for young workers or in rural areas) or even through the general education programme of the 'technicums' (technical colleges from 15 to 19). A very distinct long-term trend emerges of gradually

(1) See IIEP publication: Educational Planning in the USSR, Paris, UNESCO/IIEP, 1967 (and in particular the second chapter of the report of the Study Mission of the Institute).

postponing all specialisations (vocational, technical and higher) until after the complete secondary education common to all, with due regard in the basic 10 year education to development of special aptitudes, as already stated(1).

This generalisation of complete secondary education increases the number of graduates ('maturity' certificate) and hence the number of candidates for higher education. Because of this, the entrance examination to the university tends to become more and more selective (despite the increase in the number of places) and this selection is beginning to raise the social problems already briefly alluded to. Without going further into the question, one can take the opportunity to emphasize that it will be necessary to foresee the consequences that may in the long-term result from reform of the structure of secondary education with respect to problems of access to higher education, lest one is to be caught unawares by events. This is one aspect of the task of 'educational planning'.

(b) The American primary-secondary school

Although the inhabitants of the USA come from the old countries of Europe, it never knew the class schooling system (in the sense of social classes) of 19th Century Western Europe and one can say that the USA preceded the USSR in the 'continuous ladder' education system.

The origin lies in the fundamentally democratic attitude typifying the founders of the initial American Republics. Right from the outset, a common school was created for all youth: the primary school, normally followed by secondary classes; the system of multiple parallel paths following the elementary school which arose in 1950 (and which still exists today) in Western European countries hardly ever existed in the USA.

Originally, the complete 12 year general education system comprised:

- 8 years of primary education,

- 4 years of secondary education.

At present, in most American states, both primary education and secondary 'high school' education last 10 years (with three years in 'Junior high school' and 3 years in 'Senior high school'). Already, 70 per cent of American youth complete 12 years of general education.

In the 'high school' the syllabi are in principle common during the initial years and then gradually differ by choice of subject more and more in the timetable, from year to year; because of this, each pupil can

(1) In fact the available options will often form a 'pre-orientation' or even perhaps a 'pre-selection' with a view to subsequent studies.

'tailor make' a syllibus in agreement with his tutor gradually leading to a certain specialisation (scientific, literary, etc.) though without forming proper streams.

Through the choices he makes, the young American can start to prepare for some of the future specialisations of higher education.

It will be noted that the American 'high school' is so much a part of the economics and social life of America that its graduates (70 per cent of the age groups) seem to have no difficulty (at least so far) in branching either towards preparation for manual trades or in going on to higher studies. This is doubtless an example of the absences of pre-conceptions against manual work in the Anglo-Saxon mind(1).

In this respect, it would appear that the graduates of the American 'high schools' are different from those of the European 'pre-university' secondary schools and even from those of the 10 year Soviet education system. However, in the USSR, recent reforms concerning the 'polytechnisation' of the secondary school are attempting to solve this difficult problem: how to provide through the same complete secondary school the twofold orientation towards a manual career and towards higher studies?

B. Secondary school reforms in Western European countries

(a) The 1944-1945 British reforms

The 1944-1945 'Education Acts' instituted ten years of compulsory schooling (5 to 15 years) in Great Britain comprising:

(1) A period of common elementary studies (5 to 11).

(2) A period of secondary studies organised in three types of public establishment, namely:

- the 'pre-university' 'grammar schools', leading to the 'G.C.E.' O and A levels(2) (7 years of study).
- the 'modern schools' (4 years of study).
- the 'technical schools'(3) (5 years of study).

(1) And perhaps also a consequence of salary structures?

(2) 'Ordinary' and 'advanced' levels of the 'General Certificate of Education'.

(3) A system fairly limited in its scope, mostly involving the vocational training of business employees.

The pupils of the elementary classes are divided at 11 years old according to the results of the 'eleven-plus-exam' (a compulsory examination after the sixth year of elementary education). The conditions and procedures of this examination vary (the British school system is highly decentralised); however fairly broad use is made of pychological aptitude tests. The 'eleven-plus exam' in fact represents an entrance examination to the 'grammar schools' since only pupils who obtain the best results (20 to 25 per cent of the age group) are accepted. The 'modern school' which covers the majority of the 11 to 15 year age group (70 to 75 per cent) was gradually formed by converting and improving the qualification standards of the teaching body of the former terminal primary classes.

Despite progress achieved since 1945, the level of education dispensed in the 'modern schools' is not up to that of the corresponding classes in the 'grammar schools' (if only in the way the pupils are enrolled); however, it is improving and 'modern schools' are beginning to enter pupils for the G.C.E. (0) levels.

In this way, the British reformers, while generalising universal secondary education beyond 11 years, fall well short of bringing about a true common initial secondary cycle for the 11 to 15 year old age group.

Efforts are being made to achieve this in various ways:

- either through the 'bilateral' and 'multilateral' schools (which combine two or three types of secondary school in a common establishment);

- or the 'comprehensive schools', which combine all age groups after 11 years without creating sections (though using the option system).

The latter type of establishment is still in only a minority and is growing as a result of the action taken by local education authorities.

It will be observed that over and above compulsory schooling, those attending 'modern schools' can enrol in 'further education' in vocational or technical training establishments or even prepare for the G.C.E. 'O' and 'A' levels thus forming a means of 'catching up'. In addition, the private 'public schools' previously mentioned represent an extremely effective private system for 'pre-university' preparation.

(b) Reforms in the Common Market Countries

These reforms cover a very wide variety of conditions and procedures; we propose to describe them briefly before emphasizing the very variety of the educational systems revealed by the action taken by the authorities of the various countries.

(1) The structural reform of French secondary schools was started in 1959 by setting up an 'observation and orientation cycle' of 2 years and with the decision to extend compulsory schooling up to 16 years old from 1967; reform went yet further in 1963 with the extension of the 'observation and orientation cycle' to the 11-15 year old period (all the initial secondary cycle classes) and especially by grouping the pupils in this cycle in independent establishments termed 'secondary education colleges' (C.E.S.).

However, one should fully understand the difficulty set by the concrete organisation of the C.E.S. establishments which in 1967 had to take in:

- the 1st cycle pupils of the lycées (classical and modern streams representing 28 per cent of this age group;
- the pupils of general education colleges (1st modern secondary cycle, representing 32 per cent of the age group);
- the pupils of the primary terminal classes (about 40 per cent of the age group).

Now, each of these parallel streams had its own syllabus and in particular a teaching body with widely differing qualifications and traditions.

A solution was sought not in amalgamation, but in juxtaposing within the C.E.S. each type of education.. Henceforward, there are four streams to the C.E.S. : classical(1), modern I(1), modern(2) and 'terminal' with a practical orientation(3).

Of these four streams, it should be noted that the first four (70 per cent of the age group) can lead to 2nd cycle secondary classes, while the fourth mainly leads to vocational training.

In relation to the British system, the organisation of the C.E.S. is somewhat like the generalisation of the 'multilateral schools'.

(2) The Italian reform (decided in later 1962 represents an even more radical innovation.

At 1st cycle secondary (11 - 14 years), two types of secondary school were organised to follow the five-year elementary school (6 - 11): the 'average' classical school and the 'vocational' school of practical nature. Henceforward, the two types of school are merged into a common initial cycle (scuola media statale) open to all pupils on successful completion of elementary schooling. This common cycle covers a large share of common and optional subjects (Latin, technical applications, etc.).

(1) With teachers who have graduated from specialist universities.

(2) With semi-polyvalent teachers who have gone through a short university training, from the C.E.G. (College d'Enseignement Générale)

(3) With specialised teachers.

(3) In Belgium the school system is already broadly oriented towards the organisation of an initial secondary cycle common to all age groups, while maintaining a stream system:

- the intermediate classical and modern school (12 - 15) covers about 50 per cent of the age groups;

- the lower technical education cycle (12 - 15) accounts for most of the remaining half(1). However, this cycle closely approaches the intermediate school from the standpoint of the level of general education.

However, since 1959, experimental 'observation and orientation cycles' have been set up in several dozen intermediate schools, eliminating the traditional sections after the pupils have chosen from various options.

(4) The German Federal Republic and the Netherlands have not yet made any major modifications to the system of differentiated 'parallel' secondary education systems which immediately follows elementary classes.

Like the 1964 'Hamburg convention' (drawn up between the Education Ministers of the 'Lander'), the February 1963 Dutch law mainly provides for a system of transfer from one type of education to another. Admittedly, this system makes it possible to recover certain brilliant individuals misdirected into an educational stream that does not get the best from their potential. However, in our opinion, the results are very marginal and socially and pedagogically of little effectiveness.

It is true that the debate on amalgamating parallel education streams is open in these two countries, but no positive reply has been found, for reasons doubtless concerning the strength of the social structures in the countries and the absence of a political 'trend' that is strong enough to sweep aside all the obstacles facing new organization.

Conclusion

The fact is that the problem of reforming the structures of secondary education is not an abstract one, but depends on a whole deeply-rooted pedagogical and social reality (the system of parallel streams): the difficulty does not lie in conceiving a system considered as ideal, (assuming that this is possible) but in conceiving transition systems, concrete ways of changing over from the present parallel stream system to the reformed system and in accepting the difficulties arising from this transition.

The major obstacle against defining transitional measuresis the existence of a different teaching body for each of the parallel streams. If the existing 'parallel streams' are to fully merge, it will be necessary as an interim measure for many years to use the various classes of teacher in this common cycle who teach at this level. This means in actual effect

(1) Primary terminal classes (12 - 14) are now being eliminated.

that if a true common cycle (without streams) is to be organized, it will be entrusted (this would be the case in France, the German Federal Republic, the Netherlands and the United Kingdom) to most teachers who have not had a 'long' university training, in other words, the education given today in the first three or four classes of the 'lycées', 'gymnasia' and 'grammar schools', with their specialist teaching staff trained at university level, will practically disappear. In the opinion of many, this could lead to a drop in the level of 'pre-university' studies which would be particularly serious at a time when the training of scientific élites has never been so important.

This explains the solution adopted in the United Kingdom in 1944 and that applied in France since 1963.

Under the French reform, 11 to 15 year olds are actually grouped together in a common secondary establishment (the C.E.S.) though the stream system remains, with teachers of different qualification for each. While the creation of a single establishment represents a big step forward in the organization of orientation and reorientation, parallel streams within the establishment, with the ensuing social determinism, will remain. In the name of the ideal concept, this type of reform can be criticised. However, one must admit its 'historical' value of forming a necessary interim solution. The main thing is to prepare the development of this interim solution towards the final solution desired; this preparation can only be conducted by gradually standardizing the levels of recruitment in the different streams, i.e. by raising the level of training of today's least qualified teachers.

The same problem arises in the United Kingdom, where the spread of 'comprehensive schools' can only be brought about by raising the qualification of the teaching staff of the 'modern schools'.

Naturally, it may be considered surprising that Italy has succeeded in establishing a single intermediate school in one fell swoop; the reason is that the problem of different teaching staff levels hardly arose: the teachers of the intermediate schools and the general education teachers of the vocational training schools had been trained to the same level (the 'magistero' faculties of the universities). Elsewhere, it should be noted that neither the U.S.S.R. nor the United States have had to face this problem of amalgamating parallel education systems.

The example of the reform of the secondary school structure in European countries illustrates one of the aspects of 'educational planning'; this gradual organization over 10, 15 or 20 years of the changeover from today's structures to the ideal structure of the future is the area of predilection of the 'planner'.

The foregoing examples as regards choosing new structures concern the education systems of countries which are already highly industrialized and endowed with an already elevated standard of living and considerable financial means. In our opinion, it would be a serious mistake for the

developing countries to attempt immediately to copy their reforms from these examples. The history of today's most highly developed education systems, in particular the Soviet system, shows the gradual stages that should be followed and the importance of the 'time' factor in the development of educational institutions. Without enlarging at this juncture on the solutions needed for reforming the structures of general education in the developing countries, the choices must clearly be highly realistic, adapted to the social and economic realities of each country and must not rest on models fixed 'a priori'.

For instance, it is striking to note that certain experts consider it desirable to create and maintain education of the 'upper primary' type in the developing countries to ensure that employees and intermediate level executives are trained, or in other words that they advocate the 'parallel stream' system, somewhat as a historically necessary solution. Without today adopting a stand on this matter, we would merely like to see that the difficulties that the industrialized countries are encountering in reforming their secondary education as just described, first of all make it easier to analyse the problem and secondly to provide an effective and realistic solution to the problems that may have to be faced in other countries.

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